

PROJECT TITLE : CIGARETTE DEVELOPMENT - TECHNICAL REPORT
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SWITZERLAND

364 CALIFORNIA 100 mm

Objective

Adaptation of the PHILIP MORRIS MULTIFILTER 100'S to the new CALIFORNIA blend (containing 18 % of ET-1).

Description of samples and results

The trials following the specifications of the current MPH CH cigarette have been carried out with the blend of the CALIFORNIA prototype No 6P (reference is made to the monthly report of May 1980). Different cigarette papers, which are mentioned in the table below, have been tested :

Cigarette paper	Porosity (ml/cm ² /min)	Burning rate (s/15 cm)
Pela 22/54 M	24.5	47
Mauduit 110-6	41	45
Pela S 130 MN	53	60
Wattens WP 60	53	53
Ecusta 753	50	59
Pela 150	63	61

The prototype with the Pela S 130 MN cigarette paper gives the best organoleptic characteristics.

Prototype No		12 P
Blend No		CH 0336401N02
Cigarette paper		Pela S 130 MN
Tipping paper		4 x M. 0.15 . 4.5
Filter		MPH CH
Filter RTD	mm WG	75
Tobacco weight	mg/cig.	865
Total RTD	mm WG	102
Dilution US	%	33
TAR	mg/cig.	10.6
SN	mg/cig.	0.92
CO	mg/cig.	10.8
NO	mg/cig.	0.16
Puff count		10.9

333 TRIPLE FILTER

Objective

Application of the triple filter concept for the following projects : COLORADO, HARBARD, TEXAS, MANHATTAN.

Summary

Based on the experiences with the re-engineering of the FLINT cigarette (project EVEREST) the use of triple filter shows the following advantages : This type of filter enables the optimal combination of filtering materials in order to maximize retention capacity with still reasonable draw-resistance (RTD) :

Plug 3 Facing the tobacco. The highest efficiency and RTD.

Plug 2 Zone of dilution. Additives-containing section. Generally additives can be applied on the low efficiency and RTD tows only.

Plug 1 Mouth piece. Option can be made to obtain required total RTD (which is in agreement with a given type of cigarette) with possibility to slightly modify the analytical figures.

Description of samples and results

COLORADO (271) / HARVARD (266) / TEXAS (299)

The following combinations were tested with the aim to have the candidate which gives the best taste and target deliveries.

Plug 2 (middle piece) was not changed :

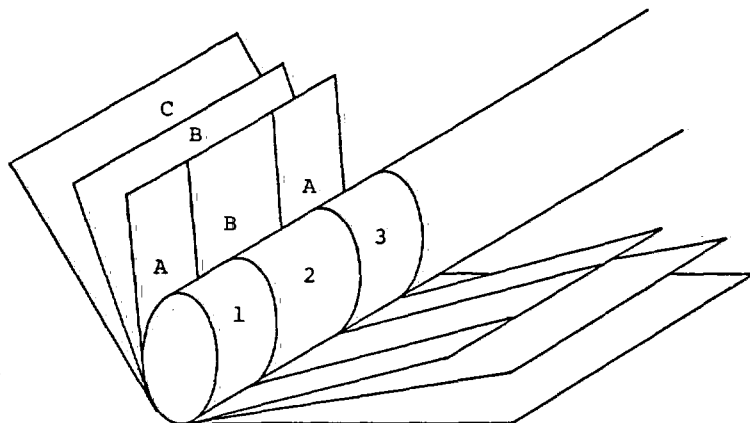
For COLORADO : 5.0 X / 40'000 Pilote charcoal 11184

For HARVARD } 5.0 X / 40'000 N.A. charcoal 14 x 30
AND COLORADO }

Plug 1	Plug 3			
	2.5Y/48000	2.5Y/55000	2.5Y/75000	3.3/55000
2.5Y/48000	HARVARD TEXAS	HARVARD COLORADO		COLORADO
2.5Y/55000		COLORADO		
3.3Y/55000			HARVARD COLORADO	
3.4I/46000	COLORADO	COLORADO	COLORADO	
5.0Y/54000	HARVARD TEXAS	HARVARD COLORADO	COLORADO	
5.0I/46000	HARVARD TEXAS		HARVARD	

All prototypes have been taste evaluated by expert panel
and retained configurations are designed below :

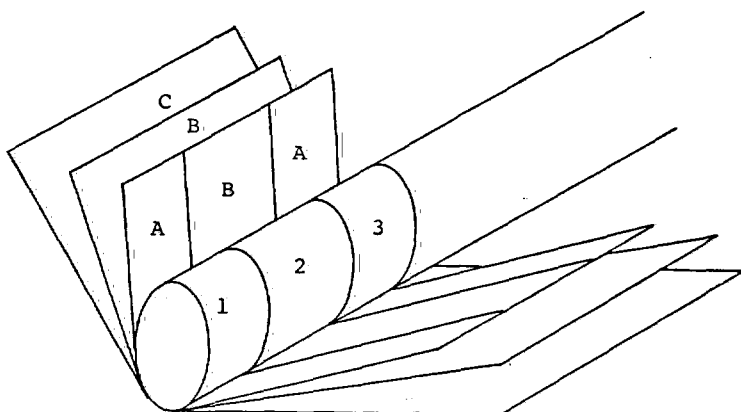
HARVARD / COLORADO



- 1) 2.5Y/48 white
- 2) 5.0X/40 black
- 3) 2.5Y/55 white

- A) White 25 g
- B) FU-POV 100
- C) Tipping paper

TEXAS



- 1) 5.0I/46 white
- 2) 5.0X/40 black
- 3) 2.5Y/48 white

- A) White 25 g
- B) FU-POV 100
- C) Tipping paper

12/19/1980/PHN/cap

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